



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,564	12/05/2003	Steve D. Huseth	(H0006281-0760)	8890

7590 03/24/2008
HONEYWELL INTERNATIONAL INC.
Law Dept. AB2
P.O. Box 2245
Morristown, NJ 07962-9806

EXAMINER

NGUYEN, NAM V

ART UNIT	PAPER NUMBER
----------	--------------

2612

MAIL DATE	DELIVERY MODE
-----------	---------------

03/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,564

Applicant(s)

HUSETH ET AL.

Examiner

NAM V. NGUYEN

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-16, 18-21, 23-36 and 38-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-16, 18-21, 23-36 and 38-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This communication is in response to applicant's Amendment which is filed November 21, 2007 by a request for continued examination.

An amendment to the claims 1, 7, 14, 26, 32 and 46 has been entered and made of record in the application of Huseth et al. for a "dual technology door entry person authentication."

Claims 8, 17 and 22 are previously cancelled and Claim 37 is currently cancelled.

Claims 1-7, 9-16, 18-21, 23-36 and 38-53 are now pending in the application.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 9-16, 18-21, 23-36 and 38-53, filed November 21, 2007 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, the phrase “transmitting an RF signal containing an authentication code from a first type of access device and a second type of access device” is confusing and unclear. It is not understood what is meant by such a limitation. Is an RF signal are the same/identical RF signal? Is only one authentication code? Both access device transmit RF signal at the same time and same authentication code? Examiner believes that the first type of access device transmits a RF signal containing an authentication code of the first type of access device and the second type of access device transmits another RF signal containing another authentication code and different than the authentication code of the first type of access device.

Referring to claims 27-31 are rejected as being dependent upon a rejected Claim 26 above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 38-39 and 46-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Ritter (US# 7,084,736).

Referring to Claims 38 and 46, Ritter disclose a method and a checking the authorization system (i.e. an access control system) (column 2 lines 12 to 23; see Figures 1-3), comprising:

An authorization-checking device 90 (i.e. an access device) (column 3 lines 15 to 23; column 4 lines 35 to 44; see Figure 1); and

an identification module 40 and a contactless interface 41 (i.e. a plurality of authorization modules) in association with said authorization-checking device 90 (i.e. access device) (column 3 lines 23 to 36; column 4 lines 1 to 12; see Figures 1 to 3), and both identification module 40 and a contactless interface 41 utilizing the same RF protocol (column 4 lines 14 to 22);

wherein the identification module includes identification data which comprises a fingerprint and other biometric parameters that can be determined whether the user of the

identification module is also the rightful owner (column 3 lines 38 to 51; see Figure 1) (i.e. at least one of said plurality of authorization modules receives fingerprint data from a user in order to authorize said user to utilize said access device, wherein said fingerprint data is processed by said at least one of said plurality of authorization modules) and wherein the contactless interface 41 includes authorization data (i.e. at least one other of said plurality of authorization modules receives an authorization code from a memory location) (column 4 lines 13 to 17; column 5 line 29 to 38).

Referring to claims 39 and 47, Ritter disclose the system of claims 38 and 46, further comprising a an authorization-checking device 91 (i.e. a processor) comprising said plurality of authorization modules, wherein said processor processes 91 said fingerprint data received from said user based on an indication of whether said fingerprint data received from said user is authentic in order to permit said user to access an area or a controlled apparatus or process utilizing said access device (column 4 lines 1 to 62; column 5 lines 1 to 11; see Figures 1 to 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berardi (2003/0167207) in view of Ritter (US# 7,084,736).

Referring to Claims 26-34, Berardi shows a method for providing access to a financial transaction, where the system includes two versions of the transponder 102. The first embodiment of transponder 102 does not include a fingerprint reader (figure 2); this is interpreted as a badge. The second embodiment of transponder 102 includes a fingerprint reader (figure 9); this is interpreted as a keyfob. The figure 9 transponder sends the fob ID (stored in memory 214) with the fingerprint so both can be authenticated. When the data is read from the transponder, a comparison is made to authorize financial access; this meets the limitation of determining if the received code is authentic and providing access upon authentication. If the data is from a badge, the authorization step compares account data (or the transponder ID), paragraph 59. If the data is from a keyfob the authorization step compares fingerprint data, paragraph 141. It is the examiner's position that in order to compare the received data from the figure 9 transponder with stored fingerprint data, a decision inherently is made that the data received includes fingerprint data. This meets the limitation of determining if the code is from a badge or keyfob.

However, Berardi et al. did not explicitly disclose that the badge and the keyfob utilize the same RF protocol.

In the same field of endeavor of dual access communication system, Ritter teach that an identification data module 40 and an contactless interface 41 utilize the same RF protocol and the same frequency (column 4 lines 13 to 19; see Figures 1 to 3) in order to automatic checking

and billing by readers and also identification data can be reproduced by the readers autonomously.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the same RF protocol in the identification data module and an contactless interface for the authorization and checking device taught by Ritter in the RFID reader for interrogating the transponders of Berardi et al. because using the same RF protocol would improve communication with plurality of access device autonomously in a access control system.

Claims 1-7, 9-16, 18-21, 23-25 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berardi (2003/0167207) in view of Ritter (US# 7,084,736) and in further view of Fitzgibbon (2003/0210131).

Referring to Claims 1-6, Berardi shows a method for providing access to a financial transaction, where the system includes two versions of the transponder 102. The first embodiment of transponder 102 does not include a fingerprint reader (figure 2); this is interpreted as a badge. The second embodiment of transponder 102 includes a fingerprint reader (figure 9); this is interpreted as a keyfob. The figure 9 transponder sends the fob ID (stored in memory 214) with the fingerprint so both can be authenticated. When the data is read from the transponder, a comparison is made to authorize financial access; this meets the limitation of determining if the received code is authentic and providing access upon authentication. If the data is from a badge, the authorization step compares account data (or the transponder ID),

paragraph 59. If the data is from a keyfob the authorization step compares fingerprint data, paragraph 141. It is the examiner's position that in order to compare the received data from the figure 9 transponder with stored fingerprint data, a decision inherently is made that the data received includes fingerprint data. This meets the limitation of determining if the code is from a badge or keyfob.

However, Berardi et al. did not explicitly disclose that the badge and the keyfob utilize the same RF protocol and wherein the authentication code from fingerprint keyfob comprises a digitized fingerprint signature and a rolling identifier.

In the same field of endeavor of dual access communication system, Ritter teach that an identification data module 40 and an contactless interface 41 utilize the same RF protocol and the same frequency (column 4 lines 13 to 19; see Figures 1 to 3) in order to automatic checking and billing by readers and also identification data can be reproduced by the readers autonomously.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the same RF protocol in the identification data module and an contactless interface for the authorization and checking device taught by Ritter in the RFID reader for interrogating the transponders of Berardi et al. because using the same RF protocol would improve communication with plurality of access device autonomously in a access control system.

In an analogous art, Fitzgibbon teaches an access security system where a transmitter can send codes to a garage door for access authorization. The portable transmitter (authorization module) can additionally include a fingerprint reader to send information regarding the user's

fingerprint, also for authorization. Fitzgibbon includes a processor (figure 4) in communication with the transmitters to process data received and make an authorization determination, see figure 8. Fitzgibbon is cited for teaching that in this type of system, the use of rolling codes can improve the security of the system. The fingerprints and rolling codes are separately checked against databases for authenticity. See Figure 8.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the fingerprint and rolling code processing of Fitzgibbon in the fingerprint entry transponder embodiment of Berardi in view of Ritter because adding rolling code authentication increases security in the system.

Referring to Claims 7, 9-16, 18-21 and 23-25, Berardi shows a method for providing access to a financial transaction, where the system includes two versions of the transponder 102. The first embodiment of transponder 102 does not include a fingerprint reader (figure 2); this is interpreted as a badge. The second embodiment of transponder 102 includes a fingerprint reader (figure 9); this is interpreted as a keyfob. The figure 9 transponder sends the fob ID (stored in memory 214) with the fingerprint so both can be authenticated. When the data is read from the transponder, a comparison is made to authorize financial access; this meets the limitation of determining if the received code is authentic and providing "access upon authentication. If the data is from a badge, the authorization step compares account data (or the transponder ID), paragraph 59. If the data is from a keyfob the authorization step compares fingerprint data, paragraph 141. It is the examiner's position that in order to compare the received data from the figure 9 transponder with stored fingerprint data, a decision inherently is made that the data

received includes fingerprint data. This meets the limitation of determining if the code is from a badge or keyfob.

However, Berardi et al. did not explicitly disclose that the badge and the keyfob utilize the same RF protocol and wherein the authentication code from fingerprint keyfob comprises a digitized fingerprint signature and a rolling identifier and wherein the authentication code from the keyfob comprises first and second portions, wherein the first and second portions are different types of codes.

In the same field of endeavor of dual access communication system, Ritter teach that an identification data module 40 and an contactless interface 41 utilize the same RF protocol and the same frequency (column 4 lines 13 to 19; see Figures 1 to 3) and wherein the authentication code from the terminal 4 comprises identification data (i.e. first) and authorization data (i.e. second portions), wherein the first and second portions are different types of codes (column 5 lines 29 to 37; see Figures 1-3) in order to automatic checking and billing by readers and also identification data can be reproduced by the readers autonomously.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the same RF protocol in the identification data module and an contactless interface for the authorization and checking device taught by Ritter in the RFID reader for interrogating the transponders of Berardi et al. because using the same RF protocol would improve communication with plurality of access device autonomously in a access control system.

In an analogous art, Fitzgibbon teaches an access security system where a transmitter can send codes to a garage door for access authorization. The portable transmitter (authorization

module) can additionally include a fingerprint reader to send information regarding the user's fingerprint, also for authorization. Fitzgibbon includes a processor (figure 4) in communication with the transmitters to process data received and make an authorization determination, see figure 8. Fitzgibbon is cited for teaching that in this type of system, the use of rolling codes can improve the security of the system. The fingerprints and rolling codes are separately checked against databases for authenticity. See figure 8.

Therefore it would have been obvious to one of ordinary skill in the art at the time. of the invention to have used the fingerprint and rolling code processing of Fitzgibbon in the fingerprint entry transponder embodiment of Berardi in view Ritter because adding rolling code authentication increases security in the system.

Referring to Claims 35-36, Berardi et al. in view of Ritter and in further view of Fitzgibbon disclose the method of Claim 32, Fitzgibbon teaches an access security system where a transmitter can send codes to a garage door for access authorization. The portable transmitter (authorization module) can additionally include a fingerprint reader to send information regarding the user's fingerprint, also for authorization. Fitzgibbon includes a processor (figure 4) in communication with the transmitters to process data received and make an authorization determination, see figure 8. Fitzgibbon is cited for teaching that in this type of system, the use of rolling codes can improve the security of the system. The fingerprints and rolling codes are separately checked against databases for authenticity. See figure 8.

Claims 40-44 and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter (US# 7,084,736) in view of Usui (US# 7,242,276).

Referring to claims 40-41 and 48-49, Ritter disclose the method of Claim 38 and 46, however, Ritter did not explicitly disclose that wherein said access device comprises a door lock and wherein said door lock comprises a stand alone push button lock that utilizes an authentication code to activate said stand alone push button lock, wherein said authentication code is changeable utilizing said processor.

In the same field of endeavor of access control system, Usui disclose a door lock system (1) (column 2 lines 16 to 26; see Figure 1); and wherein said door lock (1) comprises a stand alone push button lock that utilizes an authentication code to activate said stand alone push button lock, wherein said authentication code is changeable utilizing said control unit 30 (i.e. processor) (column 2 lines 27 to 62; see Figures 1-3) in order to improve security of a doorway locking system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize applying the door lock system with authentication code to activate the lock taught by Usui in the RFID reader for interrogating the transponders for checking the authorization of users of Ritter because using authentication code to activate the door lock would improve a plurality of utility of the access control system.

Referring to claims 42-43 and 50-51, Ritter disclose the method of Claim 38 and 46, and Usui disclose a fingerprint keyfob reader (column 2 lines 39 to 46; see Figures 2 and 3).

Referring to claims 44 and 52, Ritter disclose the method of Claim 38 and 46, and Usui disclose a fingerprint keyfob reader (column 2 lines 39 to 46; see Figures 2 and 3), it would be obvious to replace the finger print reader with a magnetic strip reader because the magnetic stripe reader is conventional reader.

Claims 45 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter (US# 7,084,736) in view of Fitzgibbon et al. (2003/0210131).

Referring to claims 45 and 53, Ritter disclose the method of Claim 38 and 46, however, Ritter did not explicitly disclose wherein said data is generated by said at least one of said plurality of authorization modules based on a shared and indexed mathematical function that prevents authorizing of said data, if said data is not authorized based on a particular sequence with respect to said shared and indexed mathematical function.

In the same field of endeavor of access control system, Fitzgibbon et al. disclose learning a rolling code and storing in an associated table via an address of the table, looking up in the code table is considered a shared and indexed mathematical function as claimed (see paragraph 0052; see Figure 5) in order to improve security in an access control system.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a rolling code and storing in an associated table taught by Fitzgibbon et al. in the RFID reader for interrogating the transponders for checking the authorization of users

of Ritter because using rolling code and storing in an associated table would improve security in a communication of the access control authorization system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. V. N./
Examiner, Art Unit 2612

March 27, 2008

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612